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# Inclusive education: recipe book or quest. On diversity in the classroom and educational research

Y. LEEMAN and M. VOLMAN

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Teaching that takes into account the increasing range of differences between pupils is often called 'inclusive education'. The practice of inclusive education in The Netherlands is informed by educational research that has mainly produced 'recipes' for effective education with a view to academic success. This research has tended to reduce differences between pupils to a limited number of characteristics and to reduce educational outcomes to academic success in the basics. Inspired by ethnic and gender studies, it is argued for an approach to inclusive education in which social-cultural outcomes as well as academic excellence are taken seriously and diversity is not restricted to a few standard characteristics of pupils. With reference to the authors' own research, it will be shown that the development of this broad interpretation of inclusive education demands educational research that does not merely produce recipes for dealing with certain characteristics of pupils. Research should help teachers to reflect on how diversity is manifested in their own classroom practice and suggest alternative forms of action and behaviour to achieve inclusive education.

## Introduction

Questions concerning 'diversity and inclusion' have played an increasingly important role in recent years in the discussions on innovation in education. 'To do justice to the differences between pupils and to utilise these differences' is one of three main precepts applicable to innovation in all types of secondary education in The Netherlands.<sup>1</sup> The popularity of the topic 'differences between pupils' is partly due to the increase in interest in forms of active and self-regulated learning. Owing to developments in cognitive educational psychology far more attention is now paid to individual learning processes and to differences in pupils' learning orientations and styles (Marton and Säljö 1984, Nuthall 1999).

The role of education in cultural pluralism and social cohesion figures prominently in thinking about multicultural and postmodern societies. In this context, the premise that differences between pupils do exist is a normative issue. It is linked to questions of multiculturalism and citizenship and has consequences for the objectives of education (Gutman 1994,

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Wyatt-Smith and Dooley 1997). Learning at school refers here to the development of cultural meanings and cultural identities.

The concept of inclusive education is increasingly applied to situations in which differences related to social class, gender, ethnicity, and mental and physical ability between pupils are taken into consideration. Inclusive education means that schooling is organized in such a way that all pupils can, as far as possible, be educated together, even though they are different (Wang and Reynolds 1995). Different emphases may be given to this. The ideal of inclusive education is in many cases primarily based on theorizing on educational opportunities: educating pupils together must provide all pupils with a good chance of success at school. Partly under the influence of marketization in European countries like The Netherlands, educational success is then interpreted exclusively as academic excellence (Barton 1997). Others place more emphasis on social-cultural considerations. Then the school is seen as an institution that both intentionally and unintentionally contributes to the personal and social development of its pupils. It is a place where pupils develop, in a more or less organized way, social identities and social-cultural meanings (Bruner 1996). From this perspective inclusive education cannot be defined exclusively in terms of academic achievement in the basic skills; the social-cultural outcomes of education should be part of this concept. Education is thus inclusive when it contributes to pupils' opportunities and skills to function in a just and pluriform society which, ideally, is characterized by social cohesion and room for different perspectives on the world. Political acceptance of such a broad interpretation of inclusive education has yet to be achieved.

A broad definition of inclusive education has been the inspiration in the present paper. We look for the contribution that research can make to the practice of such a broad, somewhat abstract ideal of inclusive education. After a short survey of Dutch research on gender and ethnic diversity, the results of two research projects that the present authors have carried out in this field will be presented. It is concluded that research on the course of the educational process in a heterogeneous class is important for the further development of the broad concept of inclusive education. Such research is at the same time a correction and an addition to the dominant approach in educational research that traditionally focuses, certainly in The Netherlands, on effective instruction and academic success. Within the framework of this tradition researchers have tried to identify the characteristics of education that contribute to effectiveness in terms of pupil performance. The heterogeneity of the pupil population has also been conceptualized in terms of more or less homogeneous characteristics of groups of pupils. A broad interpretation of inclusive education, which pays attention to both academic success in the narrower sense and the socio-cultural outcomes of education, such as cultural meanings and identities, possibly demands a different conceptualization of pupil characteristics, instructional characteristics and educational outcomes, and of the relationship between them. Lastly, the implications of this for the professionalization of teachers will briefly be looked at.

## Research on ethnic and gender differences

Dutch research on *ethnic differences* in education has concentrated on identifying factors that explain the generally poorer achievements of pupils from ethnic minority groups at school in comparison with those of pupils from the ethnic majority. Quantitative research has sought generally applicable conclusions on pupil and school characteristics in relation to academic success in the basic skills. By far the most attention has been paid to social-economic characteristics of pupils as an explanation for poor performance at school. Ethnic-cultural differences have not been regarded as sufficiently important for a long time. The different ethnic-cultural groups were dealt with as a whole under the heading in Dutch, '*allochtoon*'. Hence, the nature of the relationships between the different ethnic minority groups (refugees, inhabitants of the former colonies, economical migrants) and the dominant culture has been disregarded despite indications internationally that this relationship has an influence on the performance at school of young people from different ethnic origins (Ogbu 1992). The school effectiveness model mainly inspired research on school characteristics in relation to ethnic differences. School effectiveness research aims at identifying school characteristics that explain the difference in academic success of pupils (Creemers 1994). Factors shown to be the most effective were: emphasis on and time for basic skills, clear instruction, effective classroom management, educational leadership and team cohesion. Research on school characteristics that concentrates on the social-cultural outcomes of education is scarce. In short, the contribution that effective schools research has made to an empirically based concept of inclusive education was to identify a number of characteristics of pupils and schools which are probably important for the academic success of *all* pupils.

Educational research on *gender differences* suffers from some of the same problems and limitations as the research on ethnic diversity, but there are also differences. The main contribution of Dutch research on gender inequality to the development of 'gender-inclusive' education is the study of educational factors that can influence the achievements and choices of girls. Surprisingly few educational factors played a role in gender differences in education. Comparing Dutch research with the Anglo-Saxon literature (cf. Davies 1989, Kenway *et al.* 1994, Weiner 1994), it is noticeable that educational characteristics that cannot easily be formulated in terms of 'recipes for favourable achievements and choices' are on the whole neglected in Dutch research on both ethnic and gender differences. This particularly applies to educational characteristics that are difficult to quantify, for example the content of interaction between teacher and pupils and between pupils, as well as to factors that do not differentiate between schools and to factors that are only important in certain circumstances.

There is also an absence of research on a question that is vital to inclusive education, namely that of the *whys* and *wherefores* of any relations found between class and school factors and the educational outcomes of pupils. To understand these connections, research is needed on the

mechanisms and processes that take place in the classroom and school. What learning processes, both intentional and unintentional, are prompted by particular school, class and lesson factors and for which pupils. These factors may include the actions and behaviour of the teacher, the teaching methods and the teaching materials used. More qualitative and ethnographic research on processes in which gender plays a role in the classroom and school has been done in The Netherlands but it is not educational research. It is either anthropological or pedagogical research that has chosen 'the school' as the setting (ten Dam *et al.* 1997).

As in research on ethnic differences, little research has been done on social-cultural outcomes of education. It is also true of research on gender differences that girls and boys are generally dealt with as homogeneous groups without any further differentiation than their age and the type of school they attend. The characteristic that makes girls a problem is their socialization. It would seem that there is an underlying hypothesis that educational factors function in the same way for all girls.

It is striking that Dutch research on ethnic and gender differences is mainly discussed in terms of problematic characteristics of pupils. School success in terms of achievements in the basic skills or in terms of educational choices is the core issue here. Educational characteristics are seen as the ingredients of a recipe for favourably influencing these choices and achievements. The structure of this research can be expressed by the formula 'pupil characteristics  $\times$  educational characteristics = educational outcomes'. From a broad perspective of inclusive education the way in which the individual elements of this formula are interpreted and the formula itself are a problem.

Pupil characteristics are defined in terms of general social-cultural positions. It appears that these characteristics (i.e. the social position of the pupil in terms of class, gender and ethnicity) are the cause of under-achievement at school. In our opinion, social position does not determine learning. It does indeed influence the pupils' opportunities to learn and their perspectives of learning but all individuals learn and develop in their own way (Charlot 1997), depending on their personal history, previous experiences at school, self-image etc. Little or no attention is paid to differences within the various groups as the argumentation is based on differences in the general social-cultural position of pupils.

What applies to pupil characteristics is also applicable to the educational characteristics. The latter are not the cause of achievement or lack thereof. They are more the circumstances in which the learning processes occur that then result in certain achievements. Effective schools researchers themselves have also increasingly questioned the conceptualization of the role of school and class characteristics. They argue, for example, that it is not the individual factors at the level of the school and the classroom that are important but the relations between these factors in the classroom, between classes and between the school and class levels (Creemers 1994). It has also been suggested that the meaning of factors can vary according to the context (Reynolds and Packer 1992). This means that it is difficult to give general recipes for effectiveness; what is effective is not always the same. This type of research cannot, therefore, make suggestions to

individual schools on how to improve the education they provide (or, from our point of view, make it more inclusive). We saw that the 'recipe model' in the research discussed above focuses on homogenous characteristics which are easy to quantify, thereby avoiding or paying little attention to factors such as educational content and the school climate.

When considering educational outcomes, effective schools research also focuses on homogeneous characteristics that are easy to quantify. Effective schools researchers increasingly see this as a limitation and argue for ways of measuring effectiveness that do more justice to the importance of metacognitive and affective factors. Such arguments, however, never include the sort of social-cultural results of education which are of interest here, namely the development of cultural meanings and cultural identities. This is related to the way in which education and pupils are viewed. Most Dutch research on ethnic and gender differences sees school as an institution where more or less neutral knowledge and skills are transferred and pupils from ethnic minorities and girls are seen as collectors of those skills and knowledge. From this perspective, girls and pupils from ethnic minorities are seen as having certain special characteristics that influence their results at school. In the broad interpretation of inclusive education described above, however, education is a process in which pupils develop different social-cultural perspectives on the world and develop their own identities. The pupil characteristics of gender and ethnicity hence acquire a different relationship to educational outcomes; it matters what gender you are and what your ethnic background is because these categories partly determine attitudes to the world and towards learning at school.

In our approach to education and learning, the formula 'pupil characteristics  $\times$  instructional characteristics = educational outcomes' cannot be applied to what happens in education. Teachers and pupils together create the social situation in the classroom where they learn from and about each other with the help of teaching materials and teaching formats. 'Characteristics' acquire a specific meaning in this situation and their outcomes are not predetermined. Education is then a process with many unpredictable elements. Our position is that research on the course of the educational *process* in a class with a diverse composition is important for a more empirically based concept of inclusive education.

### Research on the educational process

In The Netherlands there is virtually no tradition of research on the educational process in relation to differences between pupils. Yet such research has acquired a prominent position in the Anglo-Saxon literature since the beginning of the 1980s. The idea that the meaning of gender is complex and ambiguous has been described in this literature in terms like *gender code* and *gender regime* (MacDonald 1981, Connell *et al.* 1982). This concept indicates that life at school is partly structured by *gender*. Gender is imbedded in the self-evident aspects of everyday school life even though there is no fixed meaning of masculinity and femininity and

gender differentiation is neither actively nor consciously pursued. The literature on ethnic differences in education pays attention to cultural codes at school which give meaning to ethnicity and ethnic relations (Rattansi 1992). These cultural codes can take on different forms in different schools and lessons at different times. Not only the curriculum, but also the actions and behaviour of the teacher, the social climate, the existence of certain ethnically linked streams of pupils and the ethnic composition of the personnel are all part of this cultural code. The concepts of gender and cultural code direct attention to the educational process: these codes originate in and at the same time have an influence on the course of the educational process.

Some of the research carried out by the present authors in recent years has been on the educational process in the classroom in relation to differences between pupils. With the help of two examples, it will be shown how research on the course of the educational process may contribute to the development of inclusive education. One example is a study on classroom practice in intercultural education (Leeman 1994, 1997, 1998) and the other is on gender-inclusive information and computer literacy education (Volman 1994, 1997). We used (among others) qualitative research methods such as observations and interviews. The research on intercultural education was carried out in ten secondary schools, that on information and computer literacy education in 20 secondary schools.

*Intercultural education* aims at developing cognitive and normative orientations on the multicultural society and problems such as discrimination and racism within that society. It thus mainly concerns social-cultural outcomes of education. Inclusive intercultural education should accommodate the diversity of perspectives on the multi-ethnic society and must seek a collective reappraisal of these perspectives with a view to acceptance of diversity and to developing and broadening knowledge and understanding of cultural diversity. Since the second half of the 1980s, intercultural education has been compulsory in all schools in The Netherlands with the aim of fostering the social integration of the ethnic majority and the ethnic minorities and preventing stereotyping, discrimination and racism. It has made most headway in ethnically heterogeneous schools and offers new, often supplementary material in subjects related to the social sciences: sociology, religion, economics, history, geography, and personal and social development.

The introduction of *information and computer literacy education* in the common curriculum in the first stage of secondary education in 1993 was founded on the idea that knowledge and skills in the field of information and communication technology are essential to be able to function in present-day society. From the perspective of *inclusive education* there was concern that girls would lag behind in information and computer literacy (in the sense of achievements and choices) because of the subject's association with the sciences and technology. Gender-inclusive information and computer literacy education ought to succeed in teaching boys and girls the necessary knowledge and skills in this field and make the subject meaningful for both groups.



*Research: intercultural education*

The study on intercultural education comprised ten classes in different types of secondary schools in a number of towns and cities in the west of The Netherlands, one of the most densely populated regions in Europe. Data were collected by means of lesson observations, interviews with teachers and pupils, and analysis of documents. More than 80 young people varying from 16 to 20 years of age were interviewed. The research was prompted by a lack of knowledge on how intercultural lessons work in practice and on how pupils from different ethnic backgrounds perceive the interethnic community (both in and out of school). There was some concern that intercultural lessons have little effect and work counter-productive. This may be related to the general, dominant way of thinking in The Netherlands on ethnic diversity in dichotomies like 'we the modern Dutch' and 'you the traditional foreigner' and to the conceptualization of ethnicity as a fairly self-evident characteristic of people. On starting the research it was also surmised that differences specific to a particular situation (in relation to the location of the school, the school climate, the teaching method and pupil characteristics) could have an influence on the course of the lessons and learning outcomes. For this reason, qualitative research methods were used, paying attention to the type of school, the location of the school (rural or urban area, and, associated with this, the different experience of ethnic heterogeneity pupils take to school), and the extent of and variation in the ethnic composition of the pupil population of the school.

The research results show that the diversity of perspectives on the multi-ethnic community that pupils in an ethnically heterogeneous class have are not generally reflected in the lesson content. An important factor here was the opportunity for interaction. The quality of the interaction, for example in the teacher-centred class discussions, which were common, was also important. Interethnic relations between pupils themselves and between the teacher and individual pupils were shown to have an influence on the content and course of the lesson too. Pupils sometimes made racist comments to provoke the teacher and other pupils. The relations between teacher and pupils and between pupils themselves could not be seen in isolation from the school climate and from the respect for ethnic diversity in the neighbourhood and surroundings of the school. For example, when ethnic boundaries were clearly defined in the neighbourhood, this was often the case at school too. Hence, the research provided insight into ways in which the context influences the educational process during lessons on cultural diversity and the multi-ethnic society.

*Research: gender-inclusive information and computer literacy education*

In the research on the subject information and computer literacy, the research group comprised about 500 pupils aged from 12 to 14 from 20 classes in 20 secondary schools for general secondary education. A combination of quantitative and qualitative methods was used. For the

quantitative part of the research pupils completed a questionnaire on attitudes and did a test before and after the information and computer literacy course that lasted 1 year or 6 months. During the course, three lesson observations were made in each class and a score was given for the gender-inclusiveness of the lessons. Detailed reports were made on these lessons describing the activities of the pupils and teacher. Interviews were held with 20 pupils from five schools before and after the course and with the teachers.

The research analysed the role of education in causing and counter-acting gender differences in information and computer literacy education. It examined how far the gender-inclusiveness of education (as noted in the lesson observations) is linked to the extent to which gender differences occur in the results of this education (as revealed in the written questionnaires). On the basis of the existing literature, gender-inclusiveness was defined in terms of a large number of characteristics (what should the interaction between teachers and pupils be like, what criteria should the content of the lessons meet, etc.). The educational outcomes were: (changes in) knowledge, attitudes and choices of pupils. A question was also formulated on the processes in the classroom that could give insight in relations found between educational characteristics and educational outcomes. The answer to this was sought in the analysis of the interviews with pupils and teachers and the detailed lesson reports.

Systematic differences between girls and boys were identified in both the quantitative and qualitative parts of the research. After the course, gender differences in knowledge about computers were on average smaller whereas the differences between girls and boys in enjoyment of computers had widened. Boys rated their own capabilities in the subject information and computer literacy higher than girls did resulting in girls presenting themselves as 'novices' in the interviews and boys emphasizing their 'expertise'.

In the quantitative part of the research, no clear relationship in terms of characteristics of gender-inclusiveness could be found between the educational outcomes for girls (educational attainments and the attribution of meaning to the subject) and the scores given on the basis of the lesson observations. Nevertheless, the lesson reports, on which the quantification was based, did contain interesting material. Analysing these reports, it was clear that gender-inclusiveness is not about fixed characteristics of education but about processes in which these 'characteristics' may acquire different meanings.

Countless 'recipes' exist for both intercultural education and gender-inclusive information and computer literacy lessons. They are based on a combination of educational research and practical knowledge. These recipes are about ways in which instruction can be organized in order to deal with the differences between ethnic minority and ethnic majority and between boys and girls. Research on the educational process though looks at the social situation in the classroom which teachers and pupils create together and can reveal aspects that are ignored in unequivocal tables of variables and in recipes for classroom practice. To illustrate this a few examples from both studies will now be discussed.

Many teachers are aware that it is desirable to 'take girls and pupils from ethnic minorities into consideration'. Teachers' comments on how they do this with regard to girls clearly reflect the idea that there are differences in boys' and girls' learning styles which was current in policy and educational research when the study was carried out. Nearly all the teachers mentioned gender differences in learning style. According to them, girls are more careful, quieter, more accurate, tidier, more serious, more thorough, more cautious, more eager to learn, more independent, follow instructions more precisely and learn more off by heart. Boys have more inclination to get started straight away, they try out things before reading the assignment properly, they press keys to see what happens, they react quicker, are more inquisitive and take more initiative. The question is whether this 'awareness' of these characteristics did not result more in sex-stereotyping of pupils than it contributed to education that is more appropriate to their needs.

In the dominant recipe for intercultural education that occurred in the interviews with teachers, taking pupils from ethnic minorities into consideration was given shape by treating the cultures of ethnic minorities as a learning resource. Teachers provide pupils from the ethnic majority with information about minority cultures in order to counter ignorance and prejudice. This firstly incorrectly assumes that pupils do not know about ethnic cultural differences, and that knowledge of different cultures leads to loss of prejudice. In the second place, there is the incorrect assumption that individual differences coincide with group differences, pupils from ethnic minority groups would always have a lower social position in the class, for example.

Based on the assumption that 'good teaching offers safety and recognition as a basis for learning', one of the recipes for intercultural education reads as follows: 'Take differences in culture and status between ethnic minority and ethnic majority pupils into consideration'. Differences in culture and status are often presented in the form of a dichotomy between 'Dutch' and 'foreigners'. Teachers participating in the research on intercultural education applied this dichotomy in their lessons. This was evident in the subject content of the lessons and in the way teachers addressed pupils in ethnically diverse classes. It was clear from the interviews with the pupils that their perspectives of ethnic differences and the multi-ethnic community are different to those teachers assume they have. There was a wide diversity among pupils in their perception of ethnic differences both within and between ethnic groups. Generally speaking youngsters are less likely to express ethnic differences in the form of a dichotomy than their teachers.

The interviews with pupils also revealed indications of differences specific to a particular situation in the perception and experience of ethnic diversity. This was linked with the location of the school and with school characteristics closely connected with the school climate, such as the internal mission of the school regarding ethnic diversity and the extent to which pupils have the opportunity to learn together in the same group for a reasonable period of time. A simple dichotomy is not adequate if teachers want education to fit in with the everyday life of pupils and

they want to do justice to pupils' perspectives. Given the situation-specific differences in the perception and experience of ethnic diversity, it is dubious whether a recipe based on the dichotomy 'Dutch-foreigner' is of any help to teachers.

The research on information and computer literacy education showed comparable examples of teachers making references to stereotyped gender relationships that pupils do not, or no longer recognize and which may even embarrass them. For example, pupils in one class reacted uneasily when the teacher explained how easy it is to use a database by using the example of a boy who developed a database on his girlfriends, which he checked regularly. The girls in another class reacted indignantly when the teacher specifically addressed them when an example in a book was about cookery recipes. In both cases the teachers assumed that their approach was compatible with pupils' perception and experience of everyday life.

In both studies, the present authors were confronted with the phenomenon that educational characteristics assumed to contribute to inclusive education do not always have the effect and meaning suggested in the usual recipes for inclusive education. This was apparent in different ways. Some examples follow. It is generally thought that the feeling of well being of ethnic minority pupils is improved when they are in the majority in the class, owing to the difference in social status (Teunissen 1988). This premise on social status is a starting point for the design of education. For example, it is a determining factor when groups are formed for cooperative learning. No clear relationship was found in the research on intercultural education, however, between the social status of an ethnic group and the social status of pupils from that group in the classroom. In one of the schools the difference in status was much more closely linked to the difference between urban and rural areas than between majority and minority. Power in the classroom was not always in the hands of Dutch pupils even if they were in the majority. At the very least, this hypothesis needs further attention.

It is also often assumed that it is more favourable for girls to be in the majority in a class to prevent domination by the boys. Likewise, this is not always the case. In one of the classes in the research on the subject information and computer literacy in which girls were in the majority, the teacher directed his comments at the boys when addressing the class as a whole, particularly those who were already knowledgeable about computers. Now and again he forgot to include the rest of the class in the lesson, with the result that a large group of girls looked on in silence. The girls far outnumbered the boys in another class where they clearly called the tune but in an extremely gender-stereotyped way. They provoked the strict teacher by slumping in front of the computers and refusing to touch the keyboard in case something 'weird' happened; they used gender-stereotyped behaviour to undermine the authority of the teacher. Having a majority of girls in a class may provide the necessary conditions for creating a situation which is favourable to them but it is no guarantee that counter-productive gender-specific behaviour will disappear. This characteristic of gender-inclusive education is not suitable as a recipe.

Another well-known recipe for 'gender-inclusive' education is: pay equal attention to girls and boys in the classroom. This refers to an educational characteristic that does not always have the same meaning. In the research on the subject information and computer literacy, the fact that girls were paid little attention was not always unfavourable. Information and computer literacy lessons are usually divided into two parts, one in which the class is taught as a whole and one in which pupils work on the computer either alone or in pairs. The teacher walks around the classroom ready to give help as necessary. Receiving little attention from the teacher in one of the classes meant that the girls worked in peace at their own pace while the teacher spent a lot of time with the groups of boys talking about their computers at home. The disadvantage for girls occurred when the teacher was addressing the whole class if that resulted in the level and tempo of the lesson being determined by the boys who already had a head start in knowledge and experience. Thus, what 'little attention' actually means depends on the situation. In the first example it did not have an adverse effect on girls becoming actively involved in the subject matter, in the second it did.

These examples show that recipes for dealing with ethnic and gender differences are often inadequate. Teachers must look for the best approach and most appropriate content for the current context. Realizing inclusiveness through the content and design of education and through the school climate assumes an understanding of the different meanings characteristics can acquire during the educational process. This applies to improving 'academic achievements', encouraging 'favourable choices' and the socio-cultural outcomes of education.

Finally, research on the educational process can provide more insight into and give more meaning to the relations identified in quantitative research. In the subject information and computer literacy, for example, it is often suggested that working with computers a lot is unfavourable to girls. The lesson observations and interviews showed that it is not working on the computer that has negative effects for girls but the way of working associated with this in many classes. Teachers certainly did not always succeed in creating conditions for pupils to work independently on the computer. It was often rowdy in the classroom with boys enjoying playing the role of the expert and girls attracting attention by behaving 'helplessly' ('we just don't understand'). This example shows how a well-known factor in research on effective instruction, namely 'order and quiet in the classroom' has a specific meaning in terms of gender-inclusiveness. Unstructured disorganized lessons provide plenty of room for gender-stereotyped attitudes and behaviour on the part of pupils.

### **Inclusive education: a recipe book?**

Nowadays 'attention to differences' is a hallmark for the quality of education. How to realize this quality is sought in various ways. It has been argued here in the context of inclusive education for education that takes differences between pupils into consideration with a view to achievements

in the basic skills *and* that does justice to these differences with regard to the social-cultural outcomes of education. The further development of inclusive education is depends on approaches to education and learning, and in particular on the conceptualization of pupil characteristics, educational characteristics and educational outcomes. We have pointed out the contributions and limitations of Dutch research on the effects of inclusive education by means of a discussion of research on ethnic and gender differences. Most Dutch research on ethnic and gender differences considers the school as an institution where more or less neutral knowledge and skills are transferred and pupils from ethnic minorities and girls are seen as collectors of those skills and knowledge. Girls and pupils from ethnic minorities have certain special characteristics that influence their results at school. In a broad interpretation of inclusive education, education is a process in which pupils learn to look at the world in socio-cultural ways, by making their own sense of this and integrating it into their identity. From this point of view of education and learning, what happens in education cannot be expressed in a simple formula in which educational outcomes are the direct result of the combination of pupil and instructional characteristics.

Inclusive education cannot be defined in terms of homogeneous instructional characteristics. It concerns a quality of education, which is partly determined by the individual pupils, the moment and the context. This idea not only leads to a particular attitude on educational research, but also to ideas on the professionalism of teachers. To conclude, this will be considered briefly, emphasizing that the comments are merely a starting point for further discussion. If research cannot identify recipes for improving education, the professionalization of teachers cannot be aimed at the transfer of these recipes. Professionalization should focus more on 'diversity' and concentrate on the analysis of and reflection on the way in which diversity occurs in teachers' educational practice and on their actions and behaviour on the basis of this reflection. This is in line with recent ideas on the professionalism of teachers; a professional image which increasingly tries to do justice to the fact that practical situations differ from one another and are typified by complexity, instability and uncertainty (e.g. Floden and Clarke 1988, Cochran-Smith 1995).

The idea that reflection and the careful consideration of specific situations are at issue does not mean that general theories and the findings of large-scale quantitative research, for example on the way in which ethnic and gender differences can influence learning outcomes, are of no use to teachers. The opposite is true. What is important is to understand that such theories cannot be applied to every individual pupil in the same way. Equally, not every situation in which ethnic or gender differences occur demands the same action of the teacher, as demonstrated above.

## Notes

1. The other two precepts are to stimulate the broad personal and social development of pupils and to focus on active self-regulated learning (PMVO, 1998).

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